Chapter

IX

PSYCHOTHERAPY

Psychotherapy simply means "therapy for psychological problems." Therapy typically involves a close and caring relationship between a therapist and a client. The branch of psychology that focuses on researching, diagnosing, and treating psychological problems is *clinical psychology.* The history of psychotherapy consists primarily of a long series of various therapeutic techniques, each one considered to be the best by those who developed it. The research demonstrating the effectiveness of all those methods has been generally weak and not very scientific. However, some important and influential research breakthroughs have occurred.

One question people often raise about psychotherapy is "Which method is best?" The first study in this section addressed this question using an innovative (at that time) statistical analysis and demonstrated that, in general, various forms of therapy are equally effective. Another line of research discussed in the second study, however, suggested one exception to this. If you have a *phobia* (an intense and irrational fear of something), a form of behavior therapy called *systematic desensitization* has been shown to be a superior method of treatment. The study included here was conducted by Joseph Wolpe, the psychologist who is generally credited with developing systematic desensitization. Both the third and the fourth studies in this section involved the development of two related therapeutic and diagnostic tools: the Rorschach Inkblot Method and the Thematic Apperception Test (TAT). These tests are commonly used by therapists to try to diagnose mental problems or to help their clients discuss sensitive, traumatic, or concealed psychological problems.

Reading 33: CHOOSING YOUR PSYCHOTHERAPIST

Smith, M. L., & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist, 32,* 752–760.

You do *not* have to be "crazy" to need psychotherapy. The vast majority of people treated by counselors and psychotherapists are not mentally ill but are simply

words when living conditions are such that, say, five people occupy a three-room apartment or seven people are squeezed into a four-room house, the tendency for people to withdraw or display more aggression increases. Two possible causes may be at work here. Either density is causing the pathology, or people who are more withdrawn or more aggressive end up in less crowded living situations, by choice or by ostracism, respectively.

CONCLUSION

These and many other studies demonstrate how social scientists are continuing to explore and refine the effects of density and crowding. Although the causes of social pathology are many and complex, the impact of population density, first brought to our attention by Calhoun over 45 years ago, is only one—but a very crucial—piece of the puzzle.

Evans, G. W. (1979). Behavioral and psychological consequences of crowding in humans. *Journal of Applied Social Psychology, 9,* 27–46.

Freedman, J. L., Heshka, S., & Levy, A. (1975). Population density and social pathology: Is there a relationship? *Journal of Experimental Social Psychology, 11,* 539–552.

Marsden, H. M. (1972). Crowding and animal behavior. In J. F. Wohlhill & D. H. Carson (Eds.), *Environment and the social sciences.* Washington, DC: American Psychological Association.

McCain, G., Cox, V. C., & Paulus, P. B. (1980). The relationship between illness, complaints, and degree of crowding in a prison environment. *Environment and Behavior, 8,* 283–290.

Price, E. (1999). Behavioral development in animals undergoing domestication. *Applied Animal Behavior Research, 65*(3), 245–271.

Regoeczi, W. (2002). The impact of density: The importance of nonlinearity and selection on flight and fight responses. *Social Forces, 81,* 505–530.

Torrey, E., & Yolken, R. (1998). At issue: Is household crowding a risk factor for schizophrenia and bipolar disorder? *Schizophrenia Bulletin, 24*(3), 321–324.

having problems in life that they are unable to resolve through their usual coping mechanisms and support network.

Imagine for a moment that you are experiencing a difficult, emotional time in your life. You consult with your usual group of close friends and family members, but you just cannot seem to work things out. Eventually, when you have endured the pain long enough, you decide to seek some professional help. Because you are an informed, intelligent person, you do some reading on psychotherapy and discover that many different approaches are available. You read about various types of therapy, such as *behavior therapies* (including *systematic desensitization,* discussed in Reading 34 on Wolpe's work), *humanistic therapy, cognitive therapies, cognitive-behavioral therapy,* and various Freudian-based *psychodynamic therapies.* These assorted styles of psychotherapy, although they stem from different theories and employ different techniques, all share the same basic goal: to help you change your life in ways that make you a happier, more productive, and more effective person. (See Wood, 2007, for more about various forms of psychotherapy.)

Now you may be totally confused. Which one should you choose if you need help? Here is what you need to know: (a) Does psychotherapy really work? (b) If it does work, which type works best? It may (or may not) help you to know that over the past 40 years, psychologists have been asking the same questions. Although researchers have conducted many comparison studies, most of them tend to support the method used by the psychologists conducting the study. No surprise there. In addition, most of the studies have been rather small in terms of the number of participants and the research techniques used. To make matters worse, the studies are spread over a wide range of books and journals, making a fully informed judgment extremely difficult.

To fill this gap in the research literature on psychotherapy techniques, in 1977 Mary Lee Smith and Gene Glass at the University of Colorado undertook the task of compiling virtually all the studies on psychotherapy effectiveness that had been done up to that time and reanalyzing them. By searching through 1,000 various magazines, journals, and books, they selected 375 studies that had tested the effects of counseling and psychotherapy. The researchers then applied *meta-analysis*—a technique developed by Glass—to the data from all the studies in an attempt to determine overall the relative effectiveness of different methods. (A meta-analysis takes the results of many individual studies and integrates them into a larger statistical analysis so that the diverse evidence is combined into a more meaningful whole.)

THEORETICAL PROPOSITIONS

The goals of Smith and Glass's study were the following (p. 752):

1. To identify and collect all studies that tested the effects of counseling and psychotherapy
2. To determine the magnitude of the effect of therapy in each study
3. To compare the outcomes of different types of therapy

The theoretical proposition implicit in these goals was that when this meta-analysis was complete, psychotherapy would be shown to be effective and differences in effectiveness of the various methods, if any, could be demonstrated.

METHOD

Although the 375 studies analyzed by Smith and Glass varied greatly in terms of the research method used and the type of therapy assessed, each study examined at least one group that received psychotherapy compared with another group that received a different form of therapy or no therapy at all (a control group). The magnitude of the *effect of therapy* was the most important finding for Smith and Glass to include in their meta-analysis. This effect size was obtained for any outcome measure of the therapy that the original researcher chose to use. Often, studies provided more than one measurement of effectiveness, or the same measurement may have been taken more than once. Examples of outcomes used to assess effectiveness were increases in self-esteem, reductions in anxiety, improvements in school work, and improvements in general life adjustment. Wherever possible, all the measures used in a particular study were included in the meta-analysis.

A total of 833 effect sizes were combined from the 375 studies. These studies included approximately 25,000 subjects. The authors reported that the average age of the participants in the studies was 22 years and that they had received an average of 17 hours of therapy from therapists who had an average of 3.5 years of experience.

RESULTS

First, Smith and Glass compared all the treated participants with all the untreated participants for all types of therapy and all measures of outcome. They found that "the average client receiving therapy was better off than 75% of the untreated controls.... The therapies represented by the available outcome calculations moved the average client from the 50th percentile to the 75th percentile" (pp. 754–755). (*Percentiles* indicate the percentage of individuals whose scores on any measurement fall beneath the specific score of interest. For example, if you score in the 90th percentile on a test, it means that 90% of those who took the same test scored lower than you.) Furthermore, only 99 (or 12%) of the 833 effect sizes were negative (meaning the client was worse off than before therapy). The authors pointed out that if psychotherapy were ineffective, the number of negative effect sizes should be equal to or greater than 50%, or 417.

Second, various measures of psychotherapy effectiveness were compared across all the studies. These findings are represented in Figure 33-1, which clearly demonstrates that therapy, in general, was found to be significantly more effective than no treatment.

Third, Smith and Glass compared the various psychotherapy methods found in all the studies they analyzed using similar statistical procedures. Figure 33-2 is a summary of their findings for the more familiar psychotherapeutic methods.

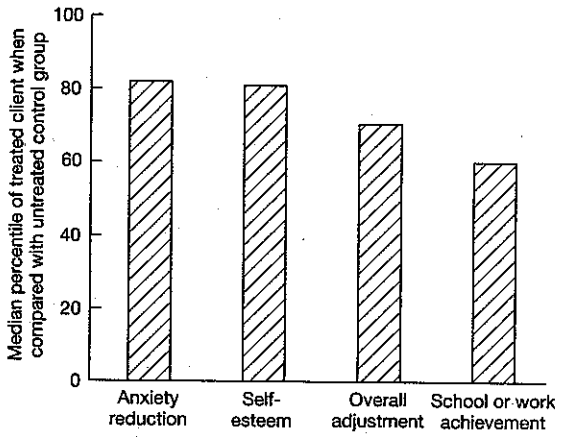

FIGURE 33-1 Combined effectiveness of all studies analyzed for four outcome measures. If no improvement had occurred, the clients would have had scores of 50. If their condition had become worse, their scores would have been below 50. (Adapted from p. 756.)

Smith and Glass combined all the various methods into two "superclasses" of therapy: a *behavioral superclass*, consisting of systematic desensitization, behavior modification, and implosion therapy, and a *nonbehavioral superclass* made up of the remaining types of therapy. When they analyzed all the studies in which either behavioral and nonbehavioral therapies were compared with no-treatment controls, all differences between the two superclasses disappeared (73rd and 75th percentile, respectively, relative to controls).

DISCUSSION

Overall, psychotherapy appeared to be successful in treating various kinds of problems (Figure 33-1). In addition, no matter how the different types of therapy were divided or combined, the differences among them were found to be insignificant (Figure 33-2).

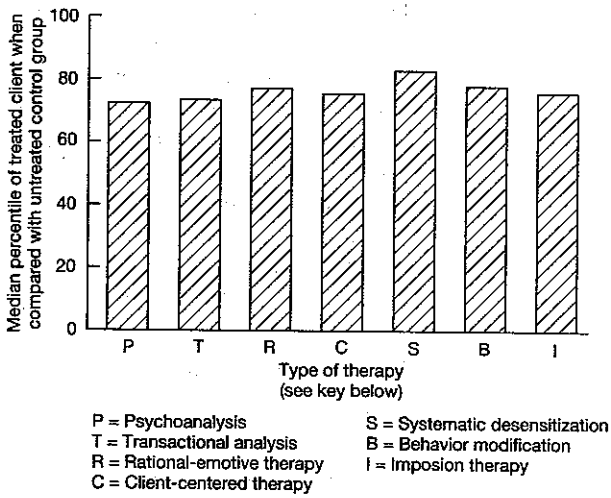

FIGURE 33-2 Comparison of the effectiveness of seven methods of psychotherapy. As in Figure 33-1, any score above 50 indicates improvement. (Adapted from p. 756.)

Smith and Glass drew three conclusions from their findings. One is that psychotherapy works. The results of the meta-analysis clearly support the assertion that people who seek therapy are better off with the treatment than they were without it. Second, "despite volumes devoted to the theoretical differences among different schools of psychotherapy, the results of research demonstrate negligible differences in the effects produced by different therapy types. Unconditional judgments of the superiority of one type or another of psychotherapy . . . are unjustified" (p. 760). Third, the assumptions researchers and therapists have made about psychotherapy's effectiveness are weak because the relevant information has been spread too thinly across multitudes of publications. Therefore, they suggested that their study was a step in the right direction toward solving the problem and that research using similar techniques deserves further attention.

IMPLICATIONS AND SUBSEQUENT RESEARCH

The findings from Smith and Glass's study made the issue of psychotherapy effectiveness less confusing for consumers—but more confusing for therapists. Those who choose psychotherapy as a career often feel a personal investment in believing that one particular method (theirs) is more effective than others. However, the conclusions from Smith and Glass's study have been supported by subsequent research (Landman & Dawes, 1982; Smith, Glass, & Miller, 1980). One of the outcomes of this line of research was an increase in therapists' willingness to take an *eclectic* approach to helping their clients, meaning that in their treatment practices they combine methodologies from several psychotherapeutic methods and tailor their therapy to fit each individual client and each unique problem. In fact, 40% of all therapists in practice consider themselves to be eclectic. This percentage is by far the largest of all the other single approaches.

It would be a mistake to conclude from this and similar studies that all psychotherapy is equally effective for all problems and all people. These studies take a very broad and general overview of the effectiveness of therapy. However, depending on your personality and the circumstances of your specific problem, some therapies might be more effective for you than others.

The most important consideration when choosing a therapist may not be the type of therapy at all but, rather, your *expectations* for psychotherapy, the characteristics of your therapist, and the relationship between therapist and client. If you *believe* that psychotherapy can help you, and you enter the therapeutic relationship with optimistic expectations, the chances of successful therapy are greatly increased. The connection you feel with the therapist can also make an important difference. If you trust your therapist and believe he or she can truly help, you are much more likely to experience effective therapy.

RECENT APPLICATIONS

Smith and Glass's findings and methodology both continue to exert a strong influence on research relating to the efficacy of the many forms of therapeutic intervention for various psychological problems. This influence stems

from their conclusions that most approaches to psychotherapy are equally effective, as well as from their use of the meta-analytic research technique.

Examples of research that followed the methodological trail of Smith and Glass include a study to assess the effectiveness of group therapy in treating depression (McDermut, Miller, & Brown, 2001). The authors conducted a meta-analysis of 48 studies on group therapy and depression and found that, on average, those receiving treatment improved significantly more than 85% of an untreated comparison group. The researchers concluded that "Group therapy is an efficacious treatment for depressed patients. However, little empirical work has investigated what advantages group therapy might have over individual therapy" (p. 98). Based on Smith and Glass's research, you might predict that the effectiveness is likely to be similar for group and individual approaches to therapy, but further research is needed for us to know for sure.

Another study demonstrating the diverse applications of the meta-analysis strategies described in Smith and Glass's article concerned various behavioral (e.g., non-medication) treatments for people who suffer from recurrent migraine and tension headaches (Penzien, Rains, & Andrasik, 2002). Through meta-analytic analyses, the researchers compared 30 years of studies of relaxation training, biofeedback, and stress-management interventions. Overall, they found a 35% to 50% reduction in these types of headaches with behavioral strategies alone. This is an important finding because, as the authors point out, "the available evidence suggests that the level of headache improvement with behavioral interventions may rival those obtained with widely used pharmacologic therapies" (p. 163). Based on this finding, the authors suggest that if behavioral therapies for chronic headaches can be made more available and less expensive, more doctors, as well as their patients, might opt for nondrug treatment.

A study exemplifying the broad influence of the Smith and Glass's method and findings examined the effectiveness of psychotherapy for individuals who are mentally retarded (Prout & Nowak-Drabik, 2003). Their meta-analysis examined studies with widely varying research methodologies, styles of psychotherapy, and characteristics of the clients. Results across all the studies revealed a moderate, yet significant degree of benefit to clients with mental retardation. The researchers concluded that "psychotherapeutic interventions should be considered as part of an overall treatment plan for persons with mental retardation" (p. 82).

CONCLUSION

Smith and Glass's study was a milestone in the history of psychology because it helped to remove much of the temptation for researchers to try to prove the superiority of a specific method of therapy and encouraged them instead to focus on how best to help those in psychological pain. Today, research may concentrate more directly on exactly which factors promote the fastest, the most successful, and especially the most healing therapeutic experience.

Landman, J., & Dawes, R. (1982). Psychotherapy outcome: Smith and Glass's conclusions stand up under scrutiny. *American Psychologist, 37,* 504–516.

McDermut, W., Miller, I., & Brown, R. (2001). The efficacy of group psychotherapy for depression: A meta-analysis and review of the empirical research. *Clinical Psychology: Science and Practice, 8,* 98–116.

Penzien, D., Rains, J., & Andrasik, F. (2002). Behavioral management of recurrent headaches: Three decades of experience and empiricism. *Applied Psychology and Biofeedback, 27,* 163–181.

Prout, H., & Nowak-Drabik, K. (2003). Psychotherapy with persons who have mental retardation: An evaluation of the effectiveness. *American Journal of Mental Retardation, 108,* 82–93.

Smith, M., Glass, G., & Miller, T. (1980). *The benefits of psychotherapy.* Baltimore, MD: Johns Hopkins University Press.

Wood, J. (2007). *Getting help: The complete & authoritative guide to self-assessment and treatment of mental health problems.* Oakland, CA: New Harbinger Publications.

Reading 34: RELAXING YOUR FEARS AWAY

Wolpe, J. (1961). The systematic desensitization treatment of neuroses. *Journal of Nervous and Mental Diseases, 132,* 180–203.

Before discussing this very important technique in psychotherapy called *systematic desensitization* (which means decreasing your level of anxiety or fear gently and gradually), the concept of *neuroses* should be clarified. The term *neuroses* is a somewhat outdated way of referring to a group of psychological problems for which extreme anxiety is the central characteristic. Today, such problems are usually called *anxiety disorders.* We are all familiar with anxiety and sometimes experience a high degree of it in situations that make us nervous, such as public speaking, job interviews, exams, and so on. However, when someone suffers from an anxiety *disorder,* the reactions are much more extreme, pervasive, frequent, and debilitating. Often such disorders interfere with a person's life so that normal and desired functioning is impossible.

The most common anxiety-related difficulties are phobias, panic disorder, and obsessive-compulsive disorder. If you have ever suffered from one of them, you know that this kind of anxiety can take control of your life. This chapter's discussion of the work of Joseph Wolpe (1915–1997) in treating those disorders focuses primarily on phobias. The word *phobia* comes from *Phobos,* the name of the Greek god of fear. The ancient Greeks painted images of Phobos on their masks and shields to frighten their enemies.

A phobia is an *irrational* fear. In other words, it is a fear reaction that is out of proportion to the reality of the danger. For example, if you are strolling down a path in the forest and suddenly happen upon a rattlesnake, coiled and ready to strike, you will feel fear (unless you're Harry Potter or something!). This is *not* a phobia but a normal, rational fear response to a real danger. On the other hand, if you are unable to go near the zoo because you might see a snake behind thick glass, that would probably be considered a phobia (unless you are Dudley Dursley!). This may sound humorous to you, but it's not funny at all to those who suffer from phobias. Phobic reactions are extremely uncomfortable events that involve symptoms such as dizziness, heart palpitations,

feeling faint, hyperventilating, sweating, trembling, and nausea. A person with a phobia will vigilantly avoid situations in which the feared stimulus might be encountered. Often, this avoidance can interfere drastically with a person's desired functioning in life.

Phobias are divided into three main types. *Simple* (or *specific) phobias* involve irrational fears of animals (such as rats, dogs, spiders, or snakes) or specific situations, such as small spaces (*claustrophobia*) or heights (*acrophobia*). *Social phobias* are characterized by irrational fears about interactions with others, such as public speaking or fear of embarrassment. *Agoraphobia* is the irrational fear of being in unfamiliar, open, or crowded spaces, typically developing as a result of panic attacks that have occurred in those areas. Although the various types of phobias are quite different, they share at least two common features: they are all irrational, and they all are treated in similar ways.

Early treatment of phobias centered on the Freudian concepts of psychoanalysis. This view maintains that a phobia is the result of unconscious psychological conflicts stemming from childhood traumas. It further contends that the phobia may be substituting for some other, deeper fear or anger that the person is unwilling to face. For example, a man with an irrational fear of heights (*acrophobia*) may have been cruelly teased as a small boy by his father, who pretended to try to push him off a high cliff. Acknowledging this experience as an adult might force the man to deal with his father's general abusiveness (something he doesn't want to face), so he represses it, and it is expressed instead in the form of a phobia. In accordance with this Freudian view of the source of the problem, psychoanalysts historically attempted to treat phobias by helping the person to gain insight into unconscious feelings and release the hidden emotion, thereby freeing themselves of the phobia in the process. However, such techniques, although sometimes useful for other types of psychological problems, have proven relatively ineffective in treating phobias. It appears that even when someone uncovers the underlying unconscious conflicts that may have led to the phobia, the phobia itself persists.

Joseph Wolpe was not the first to suggest the use of the systematic desensitization behavioral technique, but he is generally credited with perfecting it and applying it to the treatment of anxiety disorders. The behavioral approach differs dramatically from psychoanalytic thinking in that it is not concerned with the unconscious sources of the problem or with repressed conflicts. The fundamental idea of behavioral therapy is that you have learned an ineffective behavior (the phobia), and now you must unlearn it. This formed the basis for Wolpe's method for the treatment of phobias.

THEORETICAL PROPOSITIONS

Earlier research by Wolpe and others had discovered that fear reactions in animals could be reduced by a simple conditioning procedure. For example, suppose a rat behaves fearfully when it sees a realistic photograph of a cat. If the rat is given food every time the cat is presented, the rat will become less and

less fearful, until finally the fear response disappears entirely. The rat had originally been conditioned to associate the cat photo with fear. However, the rat's response to being fed was incompatible with the fear response. The fear response and the feeding response cannot both exist at the same time, so the fear was inhibited by the feeding response. This incompatibility of two responses is called *reciprocal inhibition* (when two responses inhibit each other, only one may exist at a given moment). Wolpe proposed the more general proposition that "if a response inhibitory to anxiety can be made to occur in the presence of anxiety-provoking stimuli . . . the bond between these stimuli and the anxiety will be weakened" (p. 180). He also argued that human anxiety reactions are quite similar to those found in the animal lab and that the concept of reciprocal inhibition could be used to treat various human psychological disorders.

In his work with people, the anxiety-inhibiting response was deep relaxation training rather than feeding. The idea was based on the theory that you cannot experience deep physical relaxation and fear at the same time. As a behaviorist, Wolpe believed that the reason you have a phobia is that you learned it sometime in your life through the process of classical conditioning, by which some object became associated in your brain with intense fear (see Reading 9 on Pavlov's research). We know from the work of Watson (see Reading 10 on Little Albert) and others that such learning is possible even at very young ages. To treat your phobia, you must experience a response that is inhibitory to fear or anxiety (relaxation) while in the presence of the feared situation. Will this treatment technique work? Wolpe's article reports on 39 cases randomly selected out of 150. Each participant's phobia was treated by the author using his systematic desensitization technique.

METHOD

Imagine that you suffer from acrophobia. This problem has become so extreme that you have trouble climbing onto a ladder to trim the trees in your yard or going above the second floor in an office building. Your phobia is interfering so much with your life that you decide to seek psychotherapy from a behavior therapist such as Joseph Wolpe. Your therapy will consist of relaxation training, construction of an anxiety hierarchy, and desensitization.

Relaxation Training

The first several sessions will deal very little with your actual phobia. Instead, the therapist will focus on teaching you how to relax your body. Wolpe recommended a form of progressive muscle relaxation introduced by Edmund Jacobson in 1938 that is still common in therapy today. The process involves tensing and relaxing various groups of muscles (such as the arms, hands, face, back, stomach, legs, etc.) throughout the body until a deep state of relaxation is achieved. This relaxation training may take several sessions with the therapist until you can create such a state on your own. After the training, you should be able to place yourself in this state of relaxation whenever

you want. Wolpe also incorporated hypnosis into the treatment for most of his cases to ensure full relaxation, but hypnosis has since been shown to be unnecessary for effective therapy because usually full relaxation can be obtained without it.

Construction of an Anxiety Hierarchy

The next stage of the process is for you and your therapist to develop a list of anxiety-producing situations or scenes involving your phobia. The list would begin with a situation that is only slightly uncomfortable and proceed through increasingly frightening scenes until reaching the most anxiety-producing event you can imagine. The number of steps in a patient's hierarchy may vary from 5 or 6 to 20 or more. Table 34-1 illustrates what might appear on your hierarchy for your phobia of heights, plus a hierarchy Wolpe developed with a patient suffering from claustrophobia, the latter taken directly from his article.

TABLE 34-1 Anxiety Hierarchies

ACROPHOBIA

1. Walking over a grating in the sidewalk
2. Sitting in a third-floor office near the window (not a floor-to-ceiling window)
3. Riding an elevator to the 45th floor
4. Watching window washers 10 floors up on a platform
5. Standing on a chair to change a lightbulb
6. Sitting on the balcony with a railing of a fifth-floor apartment
7. Sitting in the front row of the second balcony at the theater
8. Standing on the third step of a ladder to trim bushes in the yard
9. Standing at the edge of the roof of a three-story building with no railing
10. Driving around curves on a mountain road
11. Riding as a passenger around curves on a mountain road
12. Standing at the edge of the roof of a 20-story building

(Adapted from Goldstein, Jamison, & Baker, 1980, p. 371.)

CLAUSTROPHOBIA

1. Reading of miners trapped
2. Having polish on fingernails without access to remover
3. Being told of someone in jail
4. Visiting and unable to leave
5. Having a tight ring on finger
6. On a journey by train (the longer the journey, the more the anxiety)
7. Traveling in an elevator with an operator (the longer the ride, the more the anxiety)
8. Traveling alone in an elevator
9. Passing through a tunnel on a train (the longer the tunnel, the greater the anxiety)
10. Being locked in a room (the smaller the room and the longer the duration, the greater the anxiety)
11. Being stuck in an elevator (the greater the time, the greater the anxiety)

(Adapted from Wolpe, 1961 p. 197.)

Desensitization

Now you come to the actual "unlearning." According to Wolpe, no direct contact with your feared situation is necessary to reduce your sensitivity to them (something clients are very glad to hear!). The same effect can be accomplished through descriptions and visualizations. Remember, you developed your phobia through the process of association, so you will eliminate the phobia the same way. First, you are instructed to place yourself in a state of deep relaxation as you have been taught. Then the therapist begins with the first step in your hierarchy and describes the scene to you: "You are walking down the sidewalk and you come to a large grating. As you continue walking, you can see through the grating to the bottom 4 feet below." Your job is to imagine the scene while remaining completely relaxed. If this is successful, the therapist will proceed to the next step: "You are sitting in an office on the third floor . . . ," and so on. If at any moment during this process you feel the slightest anxiety, you are instructed to raise your index finger. When this happens, the presentation of your hierarchy will stop until you have returned to full relaxation. Then the descriptions will begin again from a point further down the list while you maintain your relaxed state. This process continues until you are able to remain relaxed through the entire hierarchy. Once you accomplish this, you might repeat the process several times in subsequent therapy sessions. In Wolpe's work with his clients, the number of sessions for successful treatment varied greatly. Some people claimed to be recovered in as few as six sessions, although one took nearly a hundred (this was a patient with a severe phobia of death, plus two additional phobias). The average number of sessions was around 12, which was considerably fewer than the number of sessions generally required for formal psychoanalysis, which usually lasted years.

The most important question relating to this treatment method is this: Does it work?

RESULTS

The 39 cases reported in Wolpe's article involved many different phobias, including, among others, claustrophobia, storms, being watched, crowds, bright light, wounds, agoraphobia, falling, rejection, and snakelike shapes. The success of therapy was judged by the patients' own reports and by occasional direct observation. Generally, patients who reported improvement and gradual recovery described the process in ways that led Wolpe to accept their reports as credible. The desensitization process was rated as either completely successful (freedom from phobic reactions), partially successful (phobic reactions of 20% or less of original strength), or unsuccessful.

For the 39 cases, a total of 68 phobias were treated. Of these treatments (in a total of 35 patients), 62 were judged to be completely or partially successful. This was a success rate of 91%. The remaining 6 (9%) were unsuccessful. The average number of sessions needed for successful treatment was 12.3. Wolpe explained that most of the unsuccessful cases displayed special

problems that did not allow for proper desensitization to take place, such as an inability to imagine the situations presented in the hierarchy.

Critics of Wolpe, mainly from the Freudian, psychoanalytic camp, claimed that his methods were only treating the *symptoms* and not the underlying *causes* of the anxiety. They maintained that new symptoms were bound to crop up to replace the ones treated in this way. They likened it to a leaking dike: when one hole is plugged, another eventually appears. Wolpe responded to criticisms and questions by obtaining follow-up reports at various times, over a 4-year period after treatment from 25 of the 35 patients who had received successful desensitization. Upon examining the reports he wrote, "There was no reported instance of relapse or new phobias or other neurotic symptoms. I have never observed resurgence of neurotic anxiety when desensitization has been complete or virtually so" (p. 200).

DISCUSSION

The discussion in Wolpe's article focuses on responding to the skepticism of the psychoanalysts at the time his research was done. During the 1950s, psychoanalysis was still a very common and popular form of psychotherapy. Behavior therapies created a great deal of controversy as they began to make their way into the mainstream of clinical psychology. Wolpe pointed out that the desensitization method offered several advantages over traditional psychoanalysis (see p. 202 of the original study):

1. The goals of psychotherapy can be clearly stated in every case.
2. Sources of anxiety can be clearly and quickly defined.
3. Changes in the patient's reactions during descriptions of scenes from the hierarchy can be measured during the sessions.
4. Therapy can be performed with others present (Wolpe found that having others present, such as therapists in training, during the sessions did not interfere with the effectiveness).
5. Therapists can be interchanged if desired or necessary.

SUBSEQUENT RESEARCH AND RECENT APPLICATIONS

Since Wolpe published this article and a book on the use of reciprocal inhibition in psychotherapy (Wolpe, 1958), the use of systematic desensitization has grown to the point that now it is usually considered the treatment of choice for anxiety disorders, especially phobias. This growth has been due in large part to more recent and more scientific research on its effectiveness.

A study by Paul (1969) treated college students who suffered from extreme phobic anxiety in public-speaking situations. First, all the participants were asked to give a short, ad-libbed speech to an unfamiliar audience. Their degree of anxiety was measured by observer's ratings, physiological measures, and a self-report questionnaire. The students were then randomly assigned to three treatment groups: (a) systematic desensitization, (b) insight therapy

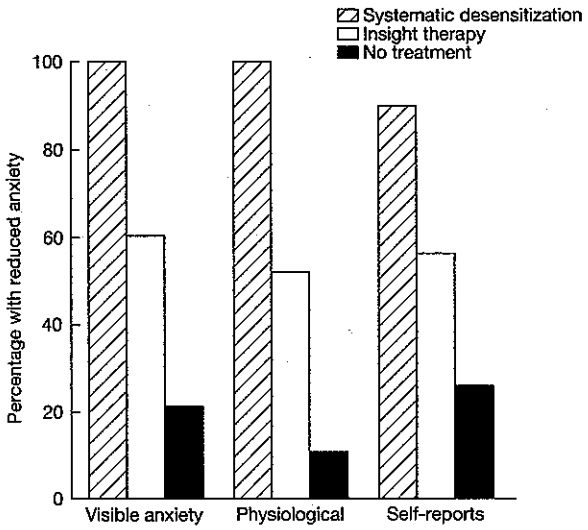

FIGURE 34-1 Results of treatment for anxiety. (From Paul, 1969.)

(similar to psychoanalysis), or (c) no treatment (control). Experienced therapists carried out the treatment in five sessions. All the participants were then placed in the same public-speaking situation, and all the same measures of anxiety were taken. Figure 34-1 summarizes the results. Clearly, systematic desensitization was significantly more effective in reducing anxiety on all measures. Even more convincing was that in a *two-year* follow-up, 85% of the desensitization group *still* showed significant improvement, compared with only 50% of the insight group.

Numerous studies on behavior therapy continue to cite Wolpe's early work as part of their theoretical underpinnings. His application of classical conditioning concepts to the treatment of psychological disorders has become part of intervention strategies in a wide range of settings. For example, one study (Fredrickson, 2000) relied in part on Wolpe's concept of reciprocal inhibition in developing a new treatment strategy for difficulties stemming primarily from negative emotions such as anxiety, depression, aggression, and stress-related health problems. Fredrickson proposes assisting and teaching patients with such psychological problems to generate more and stronger positive emotions, such as love, optimism, joy, interest, and contentment, which directly inhibit negative thinking. The author contends that

> Positive emotions loosen the hold that negative emotions gain on an individual's mind and body by undoing the narrowed psychological and physiological preparation for specific action. . . . Therapies optimize health and well being to the extent that they cultivate positive emotions. Cultivated positive emotions not only counteract negative emotions, but also broaden individuals' habitual modes of thinking, and build their personal resources for coping. (p. 1)

Another article resting on Wolpe's research studied the effectiveness of systematic desensitization for a condition many students know all too well: *math phobia* (Zettle, 2003). In this study Wolpe's treatment techniques were

used to help students overcome extreme levels of math anxiety. Participants were given instructions on progressive muscle relaxation and a tape to use to practice relaxing each day at home. Each student worked with the researcher to develop an 11-item math fear hierarchy containing items such as "being called upon by my math instructor to solve a problem at the blackboard" or "encountering a word problem I don't know how to solve on the final" (p. 205). The hierarchy was then presented to each student as described previously in this reading. To summarize briefly, it worked! At the end of the treatment, 11 out of 12 students "displayed recovery or improvement in their levels of math anxiety. . . . Furthermore, clinically significant reductions in math anxiety were maintained during the 2 months of follow-up" (p. 209).

CONCLUSION

Wolpe was quick to point out in his article that the idea of overcoming fear and anxiety was not new: "It has long been known that increasing measures of exposure to a feared object may lead to the gradual disappearance of the fear" (p. 200). In fact, you probably already knew this yourself, even if you had never heard of systematic desensitization prior to reading this chapter. For example, imagine a child who is about 13 years old and has a terrible phobia of dogs. This fear is probably the result of a frightening experience with a dog when the child was much younger, such as being jumped on by a big dog, being bitten by any dog, or even having a parent who was very afraid of dogs (phobias can be passed from parent to child through modeling). Because of these experiences, the child developed an association between dogs and fear. If you wanted to cure this child of the fear of dogs, how might you break that association? Many people's first response to this question is "Buy the child a puppy!" If that's what you thought, you have just recommended a form of systematic desensitization.

Fredrickson, B. (2000). Cultivating positive emotions to optimize health and well-being. *Prevention and Treatment, 3* (article 00001a): 1–25. Retrieved February 3, 2008, at http://www.unc.edu/peplab/publications/cultivating.pdf

Paul, G. L. (1969). Outcome of systematic desensitization: Controlled investigation of individual technique variations and current status. In C. Franks (Ed.), *Behavior Therapy: Appraisal and Status.* New York: McGraw-Hill.

Wolpe, J. (1958). *Psychotherapy through reciprocal inhibition.* Palo Alto, CA: Stanford University Press.

Zettle, R. (2003). Acceptance and commitment therapy (ACT) vs. systematic desensitization in treatment of mathematics anxiety. *Psychological Record, 53,* 197–215.

Reading 35: PROJECTIONS OF WHO YOU ARE

Rorschach, H. (1942). *Psychodiagnostics: A diagnostic test based on perception.* New York: Grune & Stratton.

Picture yourself and a friend relaxing in a grassy meadow on a warm summer's day. The blue sky above is broken only by a few white puffy clouds. Pointing to one of the clouds, you say to your friend, "Look! That cloud looks like a woman in a wedding dress with a long veil." To this your friend replies, "Where? I don't see that. To me, that cloud is shaped like a volcano with a

plume of smoke rising from the top." As you try to convince each other of your differing perceptions of the same shape, the air currents change and transform the cloud into something entirely different. But why such a difference in what the two of you saw? You were looking at the same shape and, yet, interpreting it as two entirely unrelated objects.

Everyone's perceptions are influenced by psychological factors, so perhaps the different objects found in the cloud formations revealed something about the personalities of the observers rather than the object observed. In other words, you and your friend were *projecting* something about yourselves onto the cloud shapes in the sky. This is the concept underlying Hermann Rorschach's (1884–1922) development of his "form interpretation test," better known as "the inkblot test." This was one of the earliest versions of a type of psychological assessment tool known as a *projective test.*

The two most widely used projective tests are the Rorschach inkblot (discussed in this reading) and the *Thematic Apperception Test,* or *TAT* (see Reading 36). Both these instruments are pivotal in the history of clinical psychology. Rorschach's test, first described in 1921 involves direct comparisons among various groups of mental illnesses and is often associated with the diagnosis of psychological disorders.

A *projective test* presents a person with an ambiguous shape of picture and assumes that the person, in describing the image, will *project* his or her inner or unconscious psychological processes onto it. In the case of Rorschach's test, the stimulus is nothing more than a symmetrical inkblot that is so ambiguous it can be perceived to be virtually anything. Rorschach suggested that what a person sees in the inkblot often reveals a great deal about his or her internal psychological processes. He called this the *interpretation of accidental forms.* An often-told story about Rorschach's inkblots tells of a psychotherapist who is administering the test to a client. With the first inkblot card the therapist asks, "What does this suggest to you?" The client replies, "Sex." The same question is asked of the second card, to which the client again replies, "Sex." When the same one-word answer is given to the first five cards, the therapist remarks, "Well, you certainly seem to be preoccupied with sex!" To this the surprised client responds, "Me? Doctor, you're the one showing all the sexy pictures!" Of course, this story oversimplifies Rorschach's test, and sexual interpretations would, on average, be no more likely than any other.

Rorschach believed that his projective technique could serve two main purposes. One was that it could be used as a research tool to reveal unconscious aspects of personality. The other purpose, claimed somewhat later by Rorschach, was that the test could be used to diagnose various types of psychopathology.

THEORETICAL PROPOSITIONS

The theory underlying Rorschach's technique proposed that in the course of interpreting a random inkblot, attention would be drawn away from the person so that his or her usual psychological defenses would be weakened. This,

in turn, would allow normally hidden aspects of the psyche to be revealed. When the stimulus perceived is ambiguous (that is, having few clues as to what it is), the interpretation of the stimulus must originate from the mind of the person doing the perceiving (for an expanded discussion of this concept, see Reading 36 on Murray's Thematic Apperception Test). In Rorschach's conceptualization, inkblots were about as ambiguous as you can get and, therefore, would allow for the greatest amount of projection from a person's unconscious.

METHOD

An examination of Rorschach's formulation of his inkblot test can be divided into two broad sections: the process he used to develop the original forms and the methods suggested for interpreting and scoring the responses made by participants or clients.

Development of the Test

Rorschach's explanation of how the forms were made sounded very much like instructions for a fun children's art project: "The production of such accidental forms is very simple: A few large inkblots are thrown on a piece of paper, the paper folded, and the ink spread between the two halves of the sheet" (p. 15). However, the simplicity stopped there. Rorschach went on to explain that only those designs that met certain conditions could be used effectively. For example, the inkblot should be relatively simple and moderately suggestive of vague objects. He also suggested that the forms should be symmetrical, because asymmetrical inkblots are often rejected by participants as impossible to interpret. After a great deal of testing, Rorschach finally arrived at a set of 10 forms that made up his original test. Of these, 5 were black on white, 2 used black and red, and 3 were multicolored. Figure 35-1 contains three figures of the type Rorschach used.

Administration and Scoring

Rorschach's form interpretation test is administered simply by handing a person each figure, one at a time, and asking "What might this be?" Participants are free to turn the card in any direction and to hold it as close to or as far from their eyes as they wish. The researcher or therapist administering the test notes all the responses for each figure without prodding or making any suggestions. No time limit is imposed.

Rorschach pointed out that participants almost always think the test is designed to study imagination. However, he is very careful to explain that it is not a test of imagination, and a person's imaginative creativity does not significantly alter the result. It is, Rorschach claimed, a test of perception involving the processes of sensation, memory, and unconscious and conscious associations between the stimulus forms and other psychological forces within the individual.

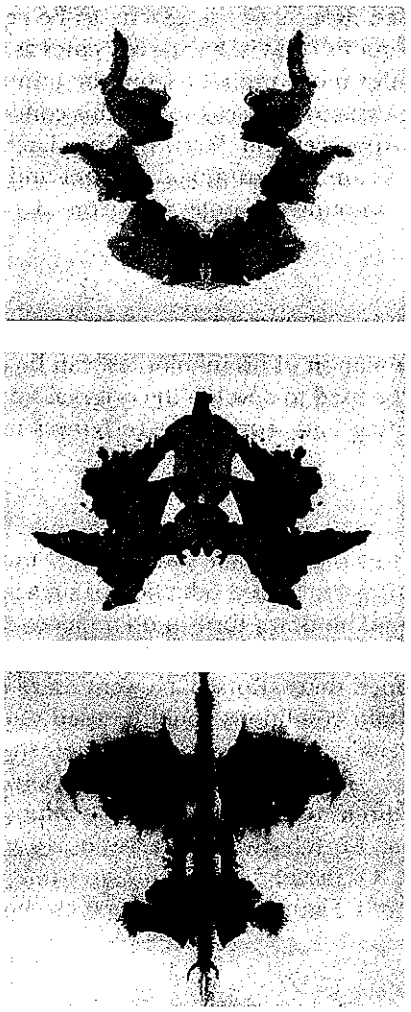

FIGURE 35-1 Examples of accidental forms similar to the type used in Rorschach's Form Interpretation test. (Hermann Rorschach, Rorchach-Test. Copyright 1921, 1948, 1994 Verlag Hans Huber, Hogrefe AG, Bern, Switzerland/ Irene Springer)

Rorschach listed the following guidelines for scoring his test subjects' responses to the 10 inkblots (p. 19):

1. How many responses were made? What was the reaction time; that is, how long did the person look at the figure before responding? How often did the participant refuse to interpret a figure?
2. Was the person's interpretation only determined by the shape of the figure, or were color or movement included in the perception?
3. Was the figure seen as a whole or in separate parts? Which parts were separated, and how were they interpreted?
4. What did the subject see?

Interestingly, Rorschach considered the content of the subject's interpretation the *least* important factor in the responses given to the inkblots. The following section summarizes Rorschach's observations, related to these four guidelines, of numerous subjects with a variety of psychological symptoms.

RESULTS

To discover how various groups of people might perform differently on the inkblot test, Rorschach and his associates administered it to individuals from several psychological groups. These included, but were not limited to, normal individuals with varying amounts of education, schizophrenic patients, and individuals diagnosed as manic-depressive.

Table 35-1 presents typical responses reported by Rorschach for the 10 inkblot figures. These, of course, vary from person to person and among different psychological groups, but the answers given in the table serve as examples.

Rorschach found that subjects generally gave between 15 and 30 total responses to the 10 figures. Depressed individuals generally gave fewer answers; those who were happy gave more; and among schizophrenics the number of answers varied a great deal from person to person. The entire test usually took between 20 and 30 minutes to complete, with schizophrenics taking much less time on average. Normal subjects almost never failed to respond to all the figures, but schizophrenics frequently refused to answer.

Rorschach believed that which portion of the form focused on by the subject, whether movement was part of the interpretation, and to what degree color entered into the responses were all very important in interpreting outcome on the test, often more important than the specific objects the person saw. His suggestions for scoring those factors were quite complex and required training and experience for a clinician to become skilled in analyzing

TABLE 35-1 Typical Responses to Rorschach's Inkblot Figures for an Average Normal Subject

FIGURE NUMBER	RESPONSES
I.	Two Santa Clauses with brooms under their arms
II.	A butterfly
III.	Two marionette figures
IV.	An ornament on a piece of furniture
V.	A bat
VI.	A moth or a tree
VII.	Two human heads or two animal heads
VIII.	Two bears
IX.	Two clowns or darting flames
X.	A rabbit's head, two caterpillars, or two spiders

(Adapted from pp. 126–127)

a person's responses properly. However, a useful and brief overall summary of the scoring process was provided by Gleitman (1991):

> Using the entire inkblot is said to indicate integrative, conceptual thinking, whereas the use of a high proportion of small details suggests compulsive rigidity. A relatively frequent use of white space is supposed to be a sign of rebelliousness and negativism. Responses that describe humans in movement are said to indicate imagination and a rich inner life; responses that are dominated by color suggest emotionality and impulsivity. (p. 684)

In regard to what a person actually sees in the inkblot, Rorschach found that the most common category of responses involved animals and insects. The percentage of animal responses ranged from 25 to 50 percent. Interestingly, depressed individuals were among those giving the greatest percentage of animal answers; artists were reported as giving the fewest.

Another category proposed by Rorschach was that of "original responses." These were answers that occurred fewer than once in 100 tests. Original responses were found most often among participants who were diagnosed as schizophrenic and least often among normal participants of average intelligence.

DISCUSSION

In his discussion of the form interpretation test, Rorschach pointed out that originally it had been designed to study theoretical questions about the unconscious workings of the human mind and psyche. His notion that the test may also have had the potential to serve as a diagnostic tool came about accidentally. Rorschach claimed that his test was often able to indicate schizophrenic tendencies, hidden neuroses, a potential for depression, characteristics of introversion versus extroversion, and intelligence. He did not, however, propose that the inkblot test should substitute for the usual practices of clinical diagnosis but, rather, that it could aid in this process. Rorschach also warned that although the test can indicate certain unconscious tendencies, it cannot be used to probe the contents of the unconscious in detail. He allowed that the other common psychological practices at the time, such as dream interpretation and free association, were superior methods for such purposes.

CRITICISMS AND SUBSEQUENT RESEARCH

Numerous studies over the decades since Rorschach developed his test have drawn many of his conclusions into question. One of the most important criticisms relates to the *validity* of the test—whether it actually measures what Rorschach claimed it measured: underlying, unconscious psychological issues. Research has demonstrated that many of the response differences attributed by Rorschach to psychological factors can be more easily explained by such things as verbal ability, age of the person, intellectual level, amount of education, and even the characteristics of the person administering the test (see Anastasi & Urbina, 2007, for a more detailed discussion of these issues).

Taken as a whole, the many decades of scientific research on Rorschach's test do not provide a particularly optimistic view of its accuracy as a personality test or diagnostic tool. Nevertheless, the test remains in common use among clinical psychologists and psychotherapists. This apparent contradiction may be explained by the fact that Rorschach's inkblot technique is often employed in clinical use, not as a formal test but, rather, as a means of increasing a therapist's understanding of individual clients and opening up lines of communication during the therapeutic process. It is, in essence, an extension of the verbal interaction that normally occurs between a therapist and a client. In this less rigid application of the responses on the test, some clinicians feel that it offers helpful insights for effective psychotherapy.

RECENT APPLICATIONS

A review of recent psychological and related literature shows that the validity of the Rorschach assessment scale continues to be studied and debated (see Wood et al., 2003; Exner & Erdberg, 2005, for a comprehensive overview of this debate). Several studies from the psychoanalytic front have indicated that newer methods of administration and scoring may increase the scale's interscorer reliability and its ability to diagnose and discriminate among various psychological disturbances. For example, Arenella and Ornduff (2000) employed the Rorschach inkblot method to study differences in body image of sexually abused girls compared to nonabused girls from otherwise stressful environments. The researchers found that sexually abused girls responded to the Rorschach test in ways that indicated a greater concern about their bodies than did their nonabused counterparts. In a similar vein, researchers obtained Rorschach scores for a group of 66 psychopathic male youth criminal offenders between the ages of 14 and 17 (Loving & Russell, 2000). This study found that at least some of the standard Rorschach variables were significantly associated with various levels of psychopathology. The authors suggested that the Rorschach test may provide a valuable means of predicting which teens are at highest risk of violently criminal behaviors and, thereby, improve prevention and intervention strategies.

An intriguing development in the validity debate stems from a study comparing the Rorschach to a commonly used *objective* psychological test called the MMPI (for *Minnesota Multiphasic Personality Inventory*) in evaluating sex offenders (Grossman et al., 2002). A common problem in testing sex offenders for psychological disorders is that they often deny having, or minimize the severity of, any such problems. This study found that sex offenders who were able to "fake good answers" on the MMPI and score normally on psychological profiles, were exposed as psychopaths by the Rorschach. "These findings indicate that the Rorschach is resilient to attempts at faking good answers and may therefore provide valuable information in forensic settings where intentional distortion is common" (p. 484). Of course, the validity of this use of the Rorschach is equally open to questions about validity as is the original use of the test.

CONCLUSION

These studies, along with many others, demonstrate the enduring influence and use of Rorschach's work. Future studies, perhaps with modifications and wider applications of the Rorschach test, may lead researchers to the development and refinement of projective tests that offer both greater scientific validity and even more valuable therapeutic insights.

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Arenella, J., & Ornduff, S. (2000). Manifestations of bodily concern in sexually abused girls. *Bulletin of the Menninger Clinic, 64*(4), 530–542.
Exner, J., & Erdberg, P. (2005) *The Rorschach, advanced interpretation.* Hoboken, NJ: Wiley.
Gleitman, H. (1991). *Psychology,* 3rd ed. New York: Norton.
Grossman, L., Wasyliw, O., Benn, A., & Gyoerkoe, K. (2002). Can sex offenders who minimize on the MMPI conceal psychopathology on the Rorschach? *Journal of Personality Assessment, 78,* 484–501.
Loving, J., & Russell, W. (2000). Selected Rorschach variables of psychopathic juvenile offenders. *Journal of Personality Assessment, 75*(1), 126–142.
Wood, J., Nezworski, M., Lilienfeld, S., & Garb, H. (2003). *What's wrong with the Rorschach? Science confronts the controversial inkblot test.* New York: Wiley.

Reading 36: PICTURE THIS!

Murray, H. A. (1938). *Explorations in personality* (pp. 531–545). New York: Oxford University Press.

In Reading 35, a method that some clinical psychologists have used to expose underlying aspects of personality, called the *projective test,* was discussed in relation to Rorschach's inkblot technique. The idea behind Rorschach's test was to allow individuals to place or project their own interpretations onto objectively meaningless and unstructured forms. Also, in an attempt to draw conclusions about the participant's personality characteristics, Rorschach examined a person's focus on particular sections in the inkblot, the various specific features of that section, and perceptions of movement in the figure. The content of the subject's interpretation was also taken into account, but it was of secondary importance.

Several years after Rorschach developed his test, Henry A. Murray (1893–1988), at the Harvard Psychological Clinic, in consultation with his associate, Christiana D. Morgan (1897–1967), developed a different form of a projective test called the *Thematic Apperception Test,* or *TAT,* which focused *entirely* on the content of the subjects' interpretations (*apperception* means "conscious perception"). Rather than formless shapes like Rorschach's inkblots, the TAT consists of black-and-white drawings depicting people in various ambiguous situations. The client in therapy is asked to make up a story about the drawing. The stories are then analyzed by the therapist or researcher, hoping to reveal hidden unconscious conflicts.

The theory behind the TAT is that when you observe human behavior, either in a picture or in real life, you will interpret that behavior according to the clues that are available in the situation. When the causes for the observed

behavior are clear, your interpretation will not only be mostly correct, it will be in substantial agreement with other observers. However, if the situation is vague and it is difficult to find reasons for the behavior, your interpretation will more likely reflect something about yourself—about your own fears, desires, conflicts, and so on. For example, imagine you see the faces of a man and a woman looking up into the sky with different expressions on their faces: he looks terrified, but she is laughing. You find it difficult to interpret their expressions. Upon looking more carefully, however, you see that they are waiting in line for a ride on "Kingda Ka," the tallest and fastest roller coaster in the world, located at Six Flags Great Adventure in New Jersey. Now you find it easier to speculate about the couple's behavior in this situation, and your analysis would probably be similar to that of other observers. Now imagine seeing the same expressions in isolation, without any situational clues to explain the behavior. If you were asked "What are these people experiencing?" your answer would depend on *your* internal interpretation and might reveal more about you than about the people you are observing. Furthermore, because of the ambiguity of the isolated behavior, different observers' answers would vary greatly (e.g., they're looking at a UFO, a ski run, small children playing on a high climbing toy, or an approaching rainstorm). These personal perception variations form the idea behind Murray and Morgan's Thematic Apperception Test.

THEORETICAL PROPOSITIONS

The basic underlying assumption of the TAT, like that of the Rorschach test, is that people's behavior is driven by unconscious forces. Implicit in this notion is an acceptance of the principles of psychodynamic psychology developed originally by Freud (see the discussion of Freud's theories in Reading 30). This view contends that unconscious conflicts (usually formed in childhood) must be exposed for accurate diagnosis and successful treatment of psychological problems. This was the purpose of Rorschach's inkblot test (discussed in Reading 35, and it was also the goal of Murray's TAT.

Murray wrote, "The purpose of this procedure is to stimulate literary creativity and thereby evoke fantasies that reveal covert and unconscious complexes" (p. 530). The way he conceived of this process was that a person would be shown ambiguous drawings of human behavior. In trying to explain the situation, the client would become less self-conscious and less concerned about being observed by the therapist. This would, in turn, cause the person to become less defensive and reveal inner wishes, fears, and past experiences that might have been repressed. Murray also pointed out that part of the theoretical foundation for this test was that "a great deal of written fiction is the conscious or unconscious expression of the author's experiences or fantasies" (p. 531).

METHOD

In the TAT's original conceptualization, participants were asked to guess the events *leading up to* the scene depicted in the drawing and what they thought the outcome of the scene would be. After testing the method, it was determined

that a great deal more about the psychology of clients could be obtained if they were simply asked to make up a story about the picture, rather than asked to guess the facts surrounding it.

Murray and Morgan developed the pictures to stimulate fantasies in people about conflicts and important events in their lives. Therefore, they decided that each picture should involve at least one person with whom everyone could easily identify. Through trial and error with several hundred pictures, a final set of 20 was chosen. Because the TAT is in common use today, many believe that widespread publication of the pictures might compromise its validity. However, understanding the test is difficult without being able to see the type of drawings chosen. Therefore, Figure 36-1 is one of the original drawings that was under consideration, but it was not ultimately chosen as one of the final 20.

Murray conducted an early study of the TAT and reported the findings in his 1938 book. Participants were men between the ages of 20 and 30. Each participant was seated in a comfortable chair facing away from the experimenter (as has been commonly practiced by psychotherapists when administering the TAT). These are the exact instructions given to each participant:

> This is a test of your creative imagination. I shall show you a picture and I want you to make up a plot or a story for which it might be used as an illustration. What is the relation of the individuals in the picture? What has happened to them? What are their present thoughts and feelings? What will be the outcome? Do your very best. Because I am asking you to indulge your literary imagination, you may make your story as long and as detailed as you wish. (p. 532)

FIGURE 36-1 Example of a TAT card. How would *you* interpret this picture? (Reprinted by permission of the publishers from Henry A. Murray, THEMATIC APPERCEPTION TEST, Card 12F, Cambridge, Mass.: Harvard University Press, Copyright © 1943 by the President and Fellows of Harvard College, Copyright © 1971 by Henry A. Murray.)

The experimenter handed the participant each picture in succession and took notes on what the participant said for each one. Each participant was given 1 hour. Due to the time limitations, most participants only completed stories for about 15 of the 20 drawings.

A few days later the participants returned and were interviewed about their stories. To disguise the true purpose of the study, participants were told that the purpose of the research was to compare their creative experiences with those of famous writers. Participants were reminded of their responses to the pictures and were asked to explain what their sources for the stories were. They were also given a free-association test, in which they were to say the first thing that came to mind in response to words spoken by the experimenter. These exercises were designed to determine to what extent the stories the participants made up about the drawings reflected their own personal experiences, conflicts, desires, and so on.

RESULTS AND DISCUSSION

Murray and Morgan reported two main findings from their early study of the TAT. The first was the discovery that the stories the participants made up for the pictures came from four sources: (a) books and movies, (b) real-life events involving a friend or a relative, (c) experiences in the participant's own life, and (d) the participant's conscious or unconscious fantasies (see p. 533 of the original study).

The second and more important finding was that the participants clearly projected their own personal, emotional, and psychological existence into their stories. One such example reported by the authors was that most of the participants who were students identified the person in one of the drawings as a student, but none of the nonstudent participants did so. In another example, the participant's father was a ship's carpenter, and the participant had strong desires to travel and see the world. This fantasy appeared in his interpretations of several of the drawings. For instance, when shown a drawing of two workers in conversation, the participant's story was "These two fellows are a pair of adventurers. They always manage to meet in out-of-the-way places. They are now in India. They have heard of a new revolution in South America and they are planning how they can get there. . . . In the end they work their way there on a freighter" (p. 534). Murray reports that, without exception, every person who participated in the study injected aspects of their personalities into their stories.

To illustrate further how the TAT reflects personal characteristics, one participant's responses were reported in detail. The participant "Virt" had emigrated to the United States from Russia after terrible childhood experiences during World War I, including persecution, hunger, and separation from his mother. Murray described picture number 13 of the TAT as follows: "On the floor against the couch is the huddled form of a boy with his head bowed on

his right arm. Beside him on the floor is an object which resembles a revolver" (p. 536). When Virt saw this drawing, his story about it was as follows:

> Some great trouble has occurred. Someone he loved has shot herself. Probably it is his mother. She may have done it out of poverty. He being fairly grown up sees the misery of it all and would like to shoot himself. But he is young and braces up after a while. For some time he lives in misery, the first few months thinking of death. (p. 536)

It is interesting to compare this story with other, more recent stories made up about the same drawing:

1. *A 35-year-old junior high school teacher:* "I think that this is someone who has been put in prison for something he did not do. He has denied that he committed any crime and has been fighting and fighting his case in the courts. But he has given up. Now he is completely exhausted, depressed, and hopeless. He made a fake gun to try to escape, but he knows this won't work either" (author's files).
2. *A 16-year-old high school student:* "This girl is playing hide-and-seek, probably with her brothers. She is counting from one to a hundred. She is sad and tired because she is never able to win and always has to be 'it.' It looks like the boys were playing some other game before because there's a toy gun here" (author's files).

You don't have to be a psychotherapist to make some predictions about the inner conflicts, motives, or desires that these three people might be projecting onto that one drawing. These examples also demonstrate the remarkably diverse responses that are possible on the TAT.

CRITICISMS AND RELATED RESEARCH

Although the TAT uses stimuli that are very different from Rorschach's inkblot test, it has been criticized on the same grounds of poor reliability and validity (see Reading 35 on Rorschach's test for additional discussion of these issues). The most serious reliability problem for the TAT is that different clinicians offer differing interpretations of the same set of TAT responses. Some have suggested that therapists may unknowingly inject their own unconscious characteristics onto the participant's descriptions of the drawings. In other words, the interpretation of the TAT might, in some cases, be a projective test for the clinician who is administering it!

In terms of validity (that is, the extent to which the TAT truly measures what it is designed to measure), several types of criticisms have been cited. If the test measures underlying psychological processes, then it should be able to distinguish between, say, normal people and people who are mentally ill, or between different types of psychological disorders. However, research has shown that it fails to make such distinctions. In a study by Eron (1950), the TAT was administered to two groups of male veterans. Some were students in college and others were patients in a psychiatric hospital. When the results of

the TAT were analyzed, no significant differences were found between the two groups or among psychiatric patients with different illnesses.

Other research has questioned the ability of the TAT to predict a person's actual behavior. For example, if a person includes a great deal of violence in the stories and plots used to describe the drawings, this does not differentiate between aggression that merely exists in someone's fantasies and the potential for *real,* violent behavior. Some people can easily fantasize about aggression without ever expressing violent behavior, although for others, aggressive fantasies will predict actual violence. Because TAT responses do not indicate into which category a particular person falls, the test is of little value in predicting aggressive tendencies (see Anastasi & Urbinai, 1996).

Another basic and very important criticism of the TAT (one that also has been directed at Rorschach's inkblot technique) relates to whether the projective hypothesis itself is valid. The assumption underlying the TAT is that people's stories about the drawings reveal something about their basic personalities and their ongoing unconscious, psychological processes. Scientific evidence suggests, however, that responses to projective tests such as the Rorschach and TAT may depend more on temporary and situational factors. What this means is that if you are given the TAT on Monday, just after work, when you've had a big fight with your boss, and then again on Saturday, just after you've returned from a relaxing day at the beach, the stories you make up for the drawings might be completely different on the two occasions. Critics argue that, to the extent that the stories are different, the TAT has only tapped into your temporary state and not your *real* underlying self.

As a demonstration of this criticism, studies have found variations in TAT performance relating to the following list of influences: hunger, lack of sleep, drug use, anxiety level, frustration, verbal ability, characteristics of the person administering the test, the attitude of the participant about the testing situation, and the participant's cognitive abilities. In light of these findings, Anne Anastasi, one of the leading authorities on psychological testing, wrote, "Many types of research have tended to cast doubt on the projective hypothesis. There is ample evidence that alternative explanations may account as well or better for the individual's responses to unstructured test stimuli" (Anastasi & Urbina, 1996).

RECENT APPLICATIONS

Every year, Murray's research and the TAT continue to be cited and incorporated into numerous studies of personality characteristics and their measurement. One study compared TAT responses of patients diagnosed with *dissociative disorders,* such as *traumatic amnesia* and *dissociative identity disorder* (previously known as *multiple personality disorder*), with those of other inpatients in a psychiatric facility (Pica et al., 2001). The researchers found that, among dissociative patients, responses to the TAT cards contained virtually no positive emotions and that the "testing behaviors of dissociative participants

were characterized by switching, trance states, intra-interview amnesia (blocking out parts of the TAT interview *during* testing), and affectively loaded [highly emotional] card rejections" (p. 847).

Murray's 1938 work has also been incorporated into research on personality disorders, including *antisocial personality* (a disregard for other people's rights; lack of guilt or remorse); *avoidant personality* (chronic and consistent feelings of inadequacy); *borderline personality* (intense anger, very unstable relationships); and *narcissistic personality* (exaggerated sense of self-importance, great need for admiration). Some studies have found that the TAT is successful in differentiating among personality disorders and that TAT scores are consistent with scores on the MMPI (Minnesota Multiphasic Personality Inventory), a widely used and fairly well validated objective personality assessment tool (Ackerman et al., 1999).

It is important to acknowledge that people's interpretation of ambiguous pictures is almost certain to vary across cultures. A study demonstrating this analyzed TAT responses of adolescents in Zambia and compared them to responses from a similar group of participants in Germany (Hofer & Chasiotis, 2004). These two groups, as you may imagine, are very diverse in terms of overall culture, beliefs, education, and life experiences. The authors found that the complexity of imagery and the interpretations given for the 5 TAT picture cards used in this study varied significantly between the two groups—so much so, in fact, that the authors suggested that using the TAT method for comparing diverse cultures on important psychological variables may be invalid.

CONCLUSION

One of the most remarkable aspects of projective tests such as the TAT and the Rorschach inkblot test is that, in spite of a massive body of evidence condemning them as invalid, unreliable, and possibly based on faulty assumptions, they are among the most frequently used psychological tests. The fact that clinicians continue to be enthusiastic about these tools while experimental psychologists grow increasingly wary is a key point of contention between those two groups (see Lilienfeld, Wood, & Garb, 2000, for a review of this issue). How can we reconcile this contradiction? The most common answer to this question is that the TAT and the Rorschach tests are often employed in psychotherapy *not* as formal diagnostic tools but rather as extensions of the early give-and-take between clinicians and their patients. It follows, then, that therapists apply these projective devices in very individual ways to open up channels of communication with clients and enter psychological domains that might have been avoided or hidden without the prompting by the stories on the TAT (see Cramer, 2006). As one practicing psychotherapist explains, "I don't score my clients' responses on the TAT or use them for diagnosis, but the drawings are a wonderful and valuable vehicle for bringing to light troubled areas in a client's life. The identification and awareness of these issues that flow from the TAT allow for more focused and effective therapy" (author's files).

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Chapter

X

SOCIAL PSYCHOLOGY

Social psychology is the branch of psychology that looks at how your behavior is influenced by that of others and how their behavior is influenced by yours. It is the study of human interaction. This branch of psychology is vast and covers a wide array of topics, from romantic relationships to group behavior to prejudice, discrimination, and aggression. This is probably the area in psychology many nonpsychologists will find the most relevant to their personal lives. Humans spend most of our waking hours interacting with other humans in one way or another, so we naturally seek to learn more about the psychological processes involved in our social relationships. Social psychology may also be the research domain that contains the greatest number of landmark studies.

The four studies chosen for this section clearly changed the field of psychology by (a) providing new insights into some extreme human social behavior; (b) sparking new waves of research to either confirm, refine, or contest theories and discoveries; and (c) creating heated controversy about research ethics that ultimately led to the ethical principles discussed in the Preface of this book.

The first discussion reviews one of the most well-known studies in the history of psychology: Philip Zimbardo's "Stanford Prison Study," which produced some startling revelations about the psychology of imprisonment. Second is a recounting of a crucial study that demonstrated the power of *conformity* in determining behavior. The third study revealed a surprising phenomenon called the *bystander effect,* which states that the more people who witness an emergency, the less likely anyone is to help. Fourth, we arrive at another famous and surprising milestone in our understanding of the extremes people may resort to in powerful situations: Stanley Milgram's study of blind obedience to authority.